#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013232 Address: 333 Burma Road **Date Inspected:** 04-Mar-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Du Zhi Qun No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Tower

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

#### BAY 10:

This QA Inspector performed Randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as Tower Strut. The weld designations reviewed are as follows.

ND1-STSA3-1-89M-1-9,10,32,35,18,45,49,15,46,44,23,21,33,11,12,34,38 NDT Notification No-005266

This QA Inspector observed the following work in progress:

**BAY 10** 

Repair Welding

This QA Inspector observed ZPMC qualified welding personnel identified as 050289 Perform Shielded Metal Arc Welding (SMAW) on Skirt Plate, I ribs Buttering up to 3~9mm on Skirt Plate, NSD1-A803A/B I rib, ZPMC QC Identified as Yuan Hai Gang. With Temporary welding repair report, WRR-T-WR3075, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

WPS-345-SMAW-2G(2F)Repair. For more information see below attached photo.

# Repair Welding

This QA Inspector observed ZPMC qualified welding personnel identified as 500363, 040582 Perform Shielded Metal Arc Welding (SMAW) on Skirt Plate, Buttering up to 3~9mm on Skirt Plate and I ribs, SSD1-A803A/B, I ribs, ZPMC QC Identified as Yuan Hai Gang. With Temporary welding repair report, WRR-T-WR3082, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-2G, 3G(2F, 3F)Repair. For more information see below attached photo.

This QA Inspector observed during random Visual inspection, ZPMC Magnetic Particle Testing (MT) Inspector performed MT on Tower Strut. Item identified as ED1-A6001-7. For more information see below attached photo.

This QA Inspector observed ZPMC qualified welding personnel identified as 040460. Perform Submerged Arc Welding (SAW) on Tower Grillage beam plate. Joint identified NSD1-TL5-3B-F-19B, ZPMC QC Identified as Yu Zhi Lai. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3221-B-U3c-S-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040460. Perform Submerged Arc Welding (SAW) on Tower Grillage beam plate. Joint identified NSD1-TL5-3B-F-19B, ZPMC QC Identified as Yu Zhi Lai. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3221-B-U3c-S-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040489. Perform Submerged Arc Welding (SAW) on Tower Grillage beam plate. Joint identified SSD1-TL5-1B-F-21A, ZPMC QC Identified as Yu Zhi Lai. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3221-B-U3c-S-1.

## **BAY 11**

#### Repair Welding

This QA Inspector observed ZPMC qualified welding personnel identified as 046704. Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 5 A/E corner joint. Joint identified, as ESD1-TL5-2B/F-36A, ZPMC QC Identified as Shao Hai Loang. With Temporary welding repair report, WRR-T-WR3078, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-2G (2F)-Repair-1. For more information see below attached photo.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)









#### **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest phone: 15000422360, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Gaikwad,Shailesh	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer